**BRENDA 5** Express Mail Label No. EK052444486US

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## **UTILITY APPLICATION AND APPLICATION FEE TRANSMITTAL (1.53(b))**

ASSISTANT COMMISSIONER FOR PATENTS **Box Patent Application** Washington, DC 20231

Sir:

Transmitted herewith for filing is the patent application of:

Named Inventor and Address: Brenda Pomerance, 260 West 52 St. Apt. 27B, New York, NY 10019

For: AUTOMATED ALTERNATIVE DISPUTE RESOLUTION

[] Amend the specification by inserting before the first line the sentence:

serial no. \_\_\_\_\_ filed

Enclosed are

[X] 21 pages of specification 1 page of Abstract 2 and 5.1:
[X]21_ pages of specification,1_ page of Abstract,2_ pages of claims1-12
[X] _1_ page of Declaration
[] unsigned [X] newly executed [] copy from prior application
[] Deletion of inventors including Signed Statement under 37 C.F.R. § 1.63(d)(2)
[] Claim for Priority
[] Certified copy of Priority Documents [] English translation
[] Information Disclosure Statement [] copy of cited references
[] copy of PTO-1449 filed in parent application serial no.
[ ] Preliminary Amendment
[X] Return receipt postcard
[] Assignment papers (assignment cover sheet and assignment documents)
[] a check in the amount of \$40.00 for recording the Assignment
[] Assignment papers filed in parent application serial no.
[] Certification of chain of title pursuant to 37 C.F.R. § 3.73(b)
[X] This is a continuation-in-part (CIP) of prior application serial no. 09/501,197
[] Cancel in this application original claims of the parent application before calculating the
filing fee (at least one original independent claim must be retained for filing purposes)
[] A Preliminary Amendment is enclosed, adding claims numbered consecutively after the highest
numbered original claim in the prior application.
[X] The status of the parent application is as follows:
[] A Petition For Extension of Time and proper Fee has been or is being filed in the parent
application to extend the term for action in the parent application until
A copy of the Petition For Extension of Time in the co-needing parent application is attached
[A] INO FERRIOR FOR EXTENSION OF Time is necessary in the co-pending parent application
I I least available the parent application at a time while the parent application is pending or at a time
when the relition for extension of time in that application is granted and while this application is
pending or has been granted a filing date, so as to make the application co-pending
[] Transfer the drawings from the parent application to this application.

This is a [] continuation [] divisional [] continuation-in-part (CIP) of co-pending application



### **CALCULATION OF APPLICATION FEE (For a Small Entity)**

	No. Filed	No. Included in Basic Fee	No. Extra	Rate per Claim	TOTAL
Basic Fee					345
Total Claims	12	20	0	9	
Independent Claims	3	3	0	39	
Multiple Dependent				130	
Claims		ļ			
TOTAL					345

- [X] A signed Statement Claiming Small Entity Status is attached or has been filed in the above-identified parent application and its benefit under 37 C.F.R. § 1.28(a) is hereby claimed. Reduced fees under 37 C.F.R. § 1.9(f) are paid herewith.
- [X] A check in the amount of \$\_345.00\_\_\_ in payment of the application filing fee is attached.

Respectfully submitted,

Date: April 5, 2000

Brenda Pomerance Reg. No. 36,894

### **CORRESPONDENCE ADDRESS:**

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT	: Brenda Pomerance	<b>GROUP ART UNIT:</b> To be assigned
FILED:	Herewith	SERIAL NO.: To be assigned
FOR:	AUTOMATED ALTER	NATIVE DISPUTE RESOLUTION
STATEM (37)	IENT (DECLARATION C.F.R. § 1.9(f) AND § 1.	) CLAIMING SMALL ENTITY STATUS 27(b) – INDEPENDENT INVENTOR)
defined in 37 (b) of Title 35 the invention e WEB SITES RECORDING	C.F.R. § 1.9(c) for purpos b, United States Code, to entitled COMMUNITY I AND MEMBER PROF G described in	te that I qualify as an independent inventor as es of paying reduced fees under section 41(a) and the Patent and Trademark Office with regard to AVING CUSTOMIZED PRE-FABRICATED LES WITH FEEDBACK AND ACTIVITY
[X]	the specification filed her	ewith
[ ] [ ]	Patent No.	, filed , issued
contract or law person who co that person had	w to assign, grant, convey buld not be classified as an d made the invention, or t	r licensed and am under no obligation under or license any rights in the invention to any independent inventor under 37 C.F.R. § 1.9(c) if any concern which would not qualify as a small d) or a nonprofit organization under 37 C.F.R. §
licensed or am license any right	concern or organization to under an obligation under that in the invention is liste No such person, concern	
notification of prior to paying	any change in status resul , or at the time of paying,	§ 1.28(b) to file, in this application or patent, ing in loss of entitlement to small entity status the earliest of the issue fee or any maintenance a small entity is no longer appropriate.
NAME OF IN	VENTOR Brenda Po	<u>merance</u>
Date: April	5, 2000 Sig	nature: Brenda Pomerance

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)

Brenda Pomerance

Filed

Herewith

Group Art Unit:

Examiner

For

AUTOMATED ALTERNATIVE DISPUTE RESOLUTION

## **EXPRESS MAIL CERTIFICATE**

Express Mail Label No: <u>EK052444486US</u>

Date of Deposit: April 5, 2000

I hereby certify that the following attached paper(s) and/or fee

- 1. Application including 21 pg. specification, 1 pg. Abstract, 2 pg. claims
- 2. 3sheets drawings
- 3. Declaration, signed
- 4. Statement Claiming Small Entity Status
- 5. Application Fee Transmittal
- 6. Check for \$345.00
- 7. Return receipt postcard

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and are addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Brenda Pomerance

### **CORRESPONDENCE ADDRESS:**

Brenda Pomerance 260 West 52 St. Apt. 27B New York, NY 10019 212 245-3940

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE APPLICATION FOR LETTERS PATENT

Inventor

Brenda POMERANCE

Title

AUTOMATED ALTERNATIVE DISPUTE RESOLUTION

## AUTOMATED ALTERNATIVE DISPUTE RESOLUTION

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This is a continuation-in-part application of co-pending application serial no. 09/501,197, filed February 10, 2000, having a common inventor herewith.

## BACKGROUND OF THE INVENTION

The present invention relates to dispute resolution, and more particularly, is directed to using a communication network to assist parties in resolving an electronic commerce dispute and automatically leaving comments to promote participation in and compliance with the automated dispute resolution.

When parties to a transaction are no longer in agreement relating to the transaction, they are having a dispute. Conventional methods for dispute resolution are laborious, often involving not only a tangible result, such as a transfer of funds, but also involving an emotional result, such as face-saving. Additionally, even after the parties resolve their conflict, one or more may fail to perform as agreed, creating an enforcement problem.

Electronic commerce (e-commerce) generally refers to buying and selling of goods and/or services using a communication network such as the Internet. Additional issues presented by a dispute relating to an e-commerce transaction include jurisdictional and venue questions, choice of law, and lack of relationship motivation. Relationship motivation refers to the well known guideline that parties who expect to have to deal with each other after a dispute is resolved tend to be more flexible and reasonable during the dispute resolution process, whereas parties that can avoid each other after the dispute resolution tend to present more polarized positions during the dispute resolution process.

When an e-commerce transaction involves a consumer purchasing from a merchant, there are additional considerations: the monetary value of the transaction is often quite small, and the

consumer's expectation with regard to timeliness of response by the merchant is for a very fast response. Accordingly, the cost of the dispute resolution process should be small, and it should proceed promptly. From the merchant's viewpoint, dispute resolution offers an opportunity to distinguish themselves to consumers, as a part of the merchant's customer service policy. From the customer's viewpoint, it may be effectively impossible to ensure compliance with any settlement due to geographic separation and the costs of travel.

Some Internet-based automated dispute resolution systems exist. These systems accept proposed settlement value amounts from the disputants, and, if the proposed amounts are within a predetermined range, split the difference. If the proposed amounts differ by more than the predetermined range, then the disputants fend for themselves.

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There is a need for a low-cost dispute resolution system that is trusted by consumers and merchants, to further increase the popularity and profitability of e-commerce.

## SUMMARY OF THE INVENTION

In accordance with an aspect of this invention, there is provided a method of automated alternative dispute resolution, comprising automatically receiving a communication from a party, the communication being a portion of a pre-defined dispute resolution process, processing the communication, and returning the processed communication to the party.

In accordance with another aspect of this invention, there is provided a method of automatically providing a comment relating to an automated alternative dispute resolution process, comprising: determining that an action or inaction by a subject has occurred in a predefined dispute resolution process, preparing a comment about the subject's action or inaction, and sending the comment to a comment collection system.

1 In accordance with a further aspect of this invention, there is provided a method of automatically preparing a record for an alternative dispute resolution process, comprising 2 3 collecting communications between an automated alternative dispute resolution system and at least one of the parties to the dispute, automatically summarizing the collection of 4 5 communications, and presenting the summary and the collection of communications to a dispute 6 resolver. 7 It is not intended that the invention be summarized here in its entirety. Rather, further 8 features, aspects and advantages of the invention are set forth in or are apparent from the 9 following description and drawings. **1**0 BRIEF DESCRIPTION OF THE DRAWINGS 111 12 13 13 14 15 Fig. 1 is a block diagram of the environment of the present invention; Fig. 2 is a chart depicting the overall steps in the automated dispute resolution system; and Figs. 3A-3C are flowcharts depicting details of the overall steps shown in Fig. 2. DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS E STORE **1**6 Conventional dispute resolution techniques can be sorted according to where decision making authority resides. In assisted negotiation, the disputants are typically interacting directly 17 with each other, with a third party typically helping to ensure the negotiations remain fluid and 18 do not get stuck. In mediation, the disputants sometimes interact with each other, and sometimes 19 have private discussions with a third party who serves to add perspective and point the disputants 20 towards conflict resolution. In arbitration, the disputants agree that a third party will decide the 21 22 outcome of their dispute after each of the disputants presents their case to the third party. In formal judicial proceedings, the disputants are represented by professional counsel, and present 23

their case to a judge, who issues a binding decision enforceable by the contempt power of the 1 court. These techniques are also roughly increasing in time of dispute resolution and cost of the 2 3 dispute resolution process. 4 The present invention is useful for assisted negotiation, and also for mediation. Because 5

of its record-keeping ability, the present invention is also helpful during arbitration.

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When communications between parties are via the Internet, the dispute resolution process naturally becomes asynchronous. This is good, as it allows the parties time to reflect and calm volatile emotions. One of the key functions of a third party in dispute resolution is to filter the emotional reactions of the disputants. An advantage of an automated system is that disputants believe it is not swayed by emotional arguments, and so is perceived as fair.

Referring now to the drawings, and in particular to Fig. 1, there is illustrated a block diagram of the environment of the present invention. Fig. 1 shows communication network 10, typically the Internet, coupled to each of customer 20, e-marketplace 30, merchant 40, comment system 50, automated alternative dispute resolution (AADR) system 70 and mediator 70.

Customer 20 and mediator 70 each employ a general-purpose personal computer having web browser software such as Netscape Navigator or Internet Explorer, and each has e-mail capability provided by a dedicated e-mail software package executed by their personal computer or by an e-mail web site.

E-marketplace 30 is a general purpose computer programmed to provide a web site wherein buyers and sellers are brought together, such as an auction web site, or an e-catalog for particular goods.

Merchant 40 is a general-purpose computer programmed to send and receive electronic mail (e-mail). Merchant 40 typically connects to Internet 10 through a third party Internet

services provider. In some cases, merchant 40 is a web site directly accessible to customer 20, and also configured for e-mail exchange.

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Comment system 50 is connected to comment-base storage 55, which is a magnetic, optical or other storage device for digital information. As described more fully in co-pending application serial no. 09/501,197, customers and merchants each have a profile associated therewith. A profile includes a user-supplied portion providing descriptive and demographic information, a comment portion comprising comment records left by other profile holders about the subject, and an activity portion comprising activity records automatically generated by activity of the user. Each comment record has a series of parameters fields, including creation date, author identification, and content descriptors, such as ratings on a scale of 1 to 5, or chosen from keywords such as poor, fair, good, very good and excellent. Each comment record also has a free-form textual portion. The parameters fields are easily searchable whereas the text field offers an opportunity for more qualitative information.

The comment portion of a profile may have sections, with satisfaction of a pre-requisite required to enable a party to leave a comment. For example, to leave a comment about a merchant, the merchant may require that a customer have visited its web site or purchased from the merchant within a predetermined period before leaving the comment. As another example, to leave a comment, the author may need to be a member of a particular group such as an opera lovers society. Comments left by a party meeting a pre-requisite tend to be more informative than comments left by general parties.

AADR system 60 is a general-purpose computer programmed according to the present invention. In one embodiment, AADR system 60 provides a web site describing the AADR process available through AADR system 60, and providing forms for customers and merchants.

1	The AADR process will now be described with regard to a transaction in which customer
2	20 purchased an item from merchant 40 at a web site provided by merchant 40.
3	Fig. 2 is a chart depicting, at a summary level, the steps in the electronically assisted
4	negotiation process. These steps are performed by software executed by AADR system 60.
. 5	At step 100, customer 20 sends a complaint to AADR system 60 which functions to
6	process the complaint and forward the processed complaint to merchant 40. As described below,
7	processing a complaint includes storing the complaint as part of the dispute case record,
8	automatically summarizing the complaint to eliminate emotional venting, providing relevant
9	legal, procedural and prior case information to customer 20, suggesting an appropriate response
<b>1</b> 0	to merchant 40, docketing the complaint for follow-up at scheduled intervals, and sending
<b>11</b> 1	comments to comment system 50 for inclusion in comment-base storage 55.
111 112 113	At step 110, the merchant sends an answer to AADR system 60, which functions to
<b>_</b> 13	process the answer and forward the processed answer to customer 20. As described below,
14 15 16	processing an answer includes storing the answer as part of the dispute case record,
<u>1</u> 5	automatically summarizing the answer, automatically detecting whether settlement has been
<b>1</b> 6	reached and advising the customer of his or her procedural alternatives.
17	Assuming settlement has not been reached, at step 120, customer 20 replies to merchant
18	40, with AADR system 60 processing the reply to ameliorate emotional ranting, detect
19	agreement for settlement, and update schedules and comments. At step 130, merchant 40 has a
20	final opportunity to respond to customer 20 via a sur-reply that is automatically processed by
21	AADR system 60.
22	After the complaint is presented, there are a variety of avenues for moving the dispute
23	into mediation 140, discussed below. AADR system 60 automatically summarizes the dispute

- record and organizes its communication record to assist mediator 70, and retains the dispute on its docket.
  - When customer 20 and merchant 40 agree on a dispute resolution, the case moves to settlement step 150, during which AADR system 60 checks to ensure that the parties comply with their settlement, updates its docket and leaves appropriate comments for the disputants.
  - Each of the complaint, answer, reply and sur-reply is a communication that is a portion of a pre-defined dispute resolution process.
  - Turning now to Figs. 3A-3C, collectively referred to as Fig. 3, the AADR process will be described in detail. The correspondence between Figs. 2 and 3 is broadly as follows:

Fig. 2	Fig. 3
step 100	steps 205-220 and 290-295
step 110	steps 225-245
step 120	steps 250-265
step 130	steps 270-285
step 140	steps 300-325
step 150	steps 350-395

- It is assumed that customer 20 has obtained a complaint form from the web site provided by AADR system 60. In other embodiments, customer 20 obtains a complaint form from other sources, such as from the web site provided by e-marketplace 30 or merchant 40. The complaint form solicits information including:
- Customer information -- actual name, physical address, contact addresses,
   communication preferences, member name at comment system 50;

1 Merchant information – name of merchant, web domain address, other contact 2 information as known; Transaction information – date of sale, receipt of goods, performance of services, 3 4 customer number, invoice number, people involved (if any); 5 Specific problem - select from a menu including (i) goods not shipped, (ii) goods arrived 6 damaged, (iii) not as described, (iv) not as expected, (v) changed mind, (vi) overcharged, 7 (vii) poor service, (viii) refund promised but not received, (ix) other 8 Description of problem - provide a free-form text statement, describing collateral harm 9 (if any); 110 111 112 113 114 115 116 Actions by customer (if any) – provide a free-form text statement; Specific remedy sought – identify any acceptable solutions, ranking by preference: (i) refund, (ii) replace, (iii) credit at merchant, (iv) partial rebate, (v) other; Statements relating to remedy (if any) - provide a free form text statement; Appended materials - if any files or images are appended to complaint, describe the file type and what it shows; and Additional information sources and contact addresses. When a merchant is complaining about a customer, a generally similar form is used, but 17 the menu of problems instead includes: (i) customer ordered but did not pay, (ii) customer 18 19 damaged item and returned, (iii) customer returned without permission, and so on. At step 205, AADR system 60 receives a complaint from customer 20 via electronic mail 20 or via its web site. AADR system 60 notifies customer 20 generally how the dispute resolution 21 process works and where more information can be obtained, provides an estimate of a reasonable 22 time frame and the automatic notification that customer 20 can expect. In one embodiment, 23

AADR system 60 notifies consumer 20 that the cost of dispute resolution is borne by the 1 2 merchant community, and advising consumer 20 of constructive ways to use the dispute 3 resolution system. In another embodiment, AADR system 60 provides a fee schedule to 4 customer 20, and requires payment before proceeding, and upon certain conditions as 5 appropriate. Also at step 205, AADR system 60 processes the complaint, to ensure that sufficient 6 7 information is provided so that the complaint states a problem and at least one desired remedy. 8 In some embodiments, customer 20 need not state a remedy. AADR system 60 also prepares a 9 complaint summary, in first person active language and without emotionally charged adjectives, \_10 based on the complaint form, and sends the summary to customer 20 for approval. Approving 111 112 113 114 115 116 the summary ensures that customer 20 immediately gets recognition of their concerns, and directs his or her attention to problem resolution, as that is the thrust of the complaint summary. Natural language processing for a subject specific area is well-known. For example, there are systems for automatically responding to electronic mail, for monitoring chat room conversations and so on. Expert system technology may be employed as appropriate, as the vocabulary and syntax for e-commerce transactions is generally restricted. In some embodiments, AADR system 60 also checks the facts of the dispute against 17 18 previously filed but abandoned disputes, to detect customers who are "trying again" to use AADR system 60. Depending on the reason for abandonment of the previously filed dispute, 19 AADR system 60 may escalate the priority of its e-mail messages, note the participant's prior 20 21 behavior and/or provide an exception report to an administrator of AADR system 60.

20, based on the information in the complaint form, to make customer 20 feel more comfortable

In some embodiments, AADR system 60 also provides a few relevant cases to customer

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with the automated dispute resolution process, and may also provide pertinent points of law
 and/or portions of the policy of merchant 40 that were previously provided to AADR system 60.

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In some embodiments, AADR system 60 also suggests an appropriate dispute resolution as an addition to or instead of the remedies indicated by customer 20 on the complaint form. A benefit of suggesting outcomes is to focus customer 20 on finishing the dispute, rather than on the history leading to the dispute.

Also during step 205, AADR system 60 configures its data base system to include a new dispute case, specifically, AADR system 60 stores the information provided by customer 20 in the initial complaint, stores its own complaint summary, and enters the case into its docketing system for generating reminders and status e-mail.

At step 210, after customer 20 has approved the complaint summary, AADR system 60 forwards the complaint summary to merchant 40. In some embodiments, customer 20 may indicate approval by failure to object within a predetermined time period. In other embodiments, customer 20 must perform a specified action to indicate approval, such as returning an e-mail to AADR system 60.

During a set-up procedure, merchant 40 registers at AADR system 60, including paying fees or setting up a payment account, and providing contact information, such as a special e-mail address to which AADR system 60 sends dispute related e-mail. Merchant 40 also indicates whether it supports and/or pays for voluntary mediation, and may provide information about its policies to be sent to customers in the event of disputes and/or when a particular type of dispute occurs. In some cases, merchant 40 provides a statement reassuring the customer that he or she is important to merchant 40, and merchant 40 appreciates the customer's time and effort in

amicably resolving their dispute. It is assumed that merchant 40 is already registered with comment system 50.

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If merchant 40 is not registered with AADR system 60 and/or comment system 50, then AADR system 60 notifies the merchant of the procedures for registering and resolving disputes, and that a customer has filed a complaint relating to merchant 40.

At step 215, AADR system 60 prepares a comment for comment system 50, indicating that there is a dispute pending for merchant 40, and sends the comment to comment system 50. A purpose of providing a comment is to motivate merchant 40 to respond promptly, so as to avoid having its profile filled with aged pending disputes. In some embodiments, comment system 50 allows merchant 40 to specify how much detail about pending disputes is provided in the comments accessible to the public. Another purpose of providing comments is to alert customers to the existence and usage of AADR system 60, to make the customers feel safer about using e-commerce and so that the customers know to use AADR system 60 if they ever have a dispute.

At step 220, AADR system 60 checks whether a response has been received from merchant 40 before the response date docketed at step 205. If merchant 40 has not yet responded, AADR system 60 sends a reminder e-mail with an "urgent" priority, and dockets a "second reminder date". If merchant 40 has still not responded by the second reminder date, then processing proceeds to step 290. In other embodiments, modifications of the automated reminder technique are employed, and/or communication alternatives such as an automatically generated voice mail message or automatically generated fax delivered to merchant 40. The non-responsiveness and/or tardiness of merchant 40 in responding becomes part of the record for this dispute, and is stored by AADR system 60.

1	At step 290, AADR system 60 prepares a comment for comment system 50 reflecting the
2	non-responsiveness of merchant 40 to the dispute related notification from AADR system 60,
3	and sends the comment to comment system 50. At step 295, AADR system 60 checks whether
4	merchant 40 has agreed to participate in voluntary mediation. If not, AADR system 60 notifies
5	customer 20 of the non-responsiveness of merchant 40 and the availability of other conventional
6	dispute resolution mechanisms, and processing is completed. If merchant 40 has agreed in
7	advance to mediation, then processing proceeds to step 300.
8	If, at step 220, AADR system 60 receives a response from merchant 40 before its
9	docketed reminder date, then AADR system 60 updates its docket to remove the reminder, and
<u> </u>	proceeds to step 225.
110 111 112	At step 225, AADR system 60 determines whether the response from merchant 40 is a
12	properly formed answer, such as by checking for the existence of various fields in the answer,
<u>1</u> 3	and ensuring that the information is within a predetermined absolute range, or range relative to
14	other information in the dispute record. If not, then AADR system 60 automatically contacts
14 15 16	merchant 40 identifying the missing or not understood information, and receives clarification;
16	these actions are not shown in Fig. 3 for brevity.
17	At step 230, AADR system 60 determines whether settlement has been reached, such as
18	by checking whether the answer agrees to at least one of the acceptable remedies identified by
19	customer 20. If so, then processing proceeds to step 350.
20	If, at step 230, AADR system 60 determines that settlement has not been reached, then at
21	step 235, AADR system 60 forwards the answer from merchant 40 to customer 20, along with a

reply form. In some embodiments, AADR system 60 provides additional information such as

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- 1 particular procedural alternatives available and the consequences of each, and suggested action
- 2 for customer 20.

the comments accessible to the public.

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Also during step 235, AADR system 60 updates its docketing system to reflect the progress of the dispute, for generating reminders and status e-mail.

At step 240, AADR system 60 prepares a comment for comment system 50, indicating that there is a dispute pending for customer 20, and sends the comment to comment system 50.

A purpose of providing a comment is to motivate customer 20 to respond promptly, so as to avoid having its profile filled with aged pending disputes. In some embodiments, comment system 50 allows customer 20 to specify how much detail about pending disputes is provided in

At step 245, AADR system 60 checks whether a response has been received from customer 20 before the response date docketed at step 235. If customer 20 has not yet responded, AADR system 60 sends a reminder e-mail with an "urgent" priority, and dockets a "second reminder date". If customer 20 has still not responded by the second reminder date, then AADR system 60 assumes that customer 20 has abandoned or otherwise resolved his or her dispute, and processing proceeds to step 285. In other embodiments, modifications of the automated reminder technique are employed, and/or communication alternatives such as an automatically generated voice mail message or automatically generated fax delivered to customer 20. The non-responsiveness and/or tardiness of customer 20 in responding becomes

At step 285, AADR system 60 prepares comments about customer 20, reflecting his or her failure to respond and constructive abandonment of the dispute, and about merchant 40, reflecting its successful resolution of the dispute, and sends the comments to comment system

part of the record for this dispute, and is stored by AADR system 60.

1 50. AADR system 60 also prepares a summary of the dispute and adds it to its data base of case 2 records, completing processing of this dispute. 3 If, at step 245, AADR system 60 receives a response from customer 20 before its docketed reminder date, then AADR system 60 updates its docket to remove the reminder, and 4 5 proceeds to step 250. 6 At step 250, AADR system 60 determines whether the response from customer 20 is a properly formed reply, such as by checking for the existence of various fields in the answer, and 7 ensuring that the information is within a predetermined absolute range, or range relative to other 8 9 information in the dispute record, and by checking whether any additional information requested **1**0 by merchant 40 has been provided. If not, then AADR system 60 automatically contacts 111 12 13 14 15 customer 20 identifying the missing or not understood information, and receives clarification; these actions are not shown in Fig. 3 for brevity. At step 255, AADR system 60 determines whether settlement has been reached, such as by checking whether the reply agrees to at least one of the resolutions proposed by or indicated as acceptable to merchant 40. If so, then processing proceeds to step 350. **1**6 If, at step 255, AADR system 60 determines that settlement has not been reached, then at 17 step 260, AADR system 60 forwards the reply from customer 20 to merchant 40. In some embodiments, AADR system 60 provides additional information such as outcomes of related 18 19 cases, and suggested action for merchant 40. 20 Also during step 260, AADR system 60 updates its docketing system to reflect the progress of the dispute, for generating reminders and status e-mail. 21 22 At step 265, AADR system 60 checks whether a response has been received from merchant 40 before the response date docketed at step 260. If merchant 40 has not yet 23

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- 1 responded, AADR system 60 sends a reminder e-mail with an "urgent" priority, and dockets a
- 2 "second reminder date". If merchant 40 has still not responded by the second reminder date,
- 3 then processing proceeds to step 290.
- 4 If, at step 265, AADR system 60 receives a response from merchant 40 before its
- 5 docketed reminder date, then AADR system 60 updates its docket to remove the reminder, and
- 6 proceeds to step 270.

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- At step 270, AADR system 60 determines whether the response from merchant 40 is a
- 8 properly formed sur-reply, such as by checking for the existence of various fields in the answer,
- 9 and ensuring that the information is within a predetermined absolute range, or range relative to
  - other information in the dispute record. If not, then AADR system 60 automatically contacts

merchant 40 identifying the missing or not understood information, and receives clarification;

these actions are not shown in Fig. 3 for brevity.

At step 275, AADR system 60 determines whether settlement has been reached, such as by checking whether the sur-reply agrees to at least one of the acceptable remedies identified by customer 20. If so, then processing proceeds to step 350.

If, at step 275, AADR system 60 determines that settlement has not been reached, then at step 280, AADR system 60 checks whether merchant 40 has agreed to participate in voluntary mediation. If merchant 40 has agreed in advance to mediation, then processing proceeds to step 300. If merchant 40 has not agreed to mediation, then AADR system 60 notifies customer 20 of the failure to reach a dispute resolution and of the availability of other conventional dispute resolution mechanisms. At step 285, AADR system 60 prepares comments about customer 20 and about merchant 40 reflecting their participation in the automated alternative dispute resolution mechanism without a settlement outcome, and sends the comments to comment

system 50. AADR system 60 also prepares a summary of the dispute and adds it to its database
 of case records, completing processing of this dispute.

At step 300, AADR system 60 has determined that merchant 40 will participate in mediation and on what payment terms. If it has not already done so, AADR system 60 notifies customer 20 of the availability of automatically assisted mediation, the procedural aspects, the consequences, the timeframe, the fees, if any, and so on. If customer 20 does not wish to participate in mediation, then AADR system 60 assumes the dispute has been successfully resolved and proceeds to step 390; this is not explicitly shown in Fig. 3 for brevity.

At step 300, AADR system 60 finds a mediator for the automatically assisted mediation. In one embodiment, AADR system 60 selects a mediator from a list of available mediators in accordance with an algorithm reflecting the relevance of the mediator's qualifications to this dispute based on parameters and keywords in the case summary, the preferences, if any, for mediator characteristics expressed by customer 20 and/or merchant 40, and subject to restrictions such as no interests of the mediator in the dispute or disputants. In another embodiment, AADR system 60 prepares a list of potentially suitable mediators and provides this list to customer 20 and merchant 40 so that they may rank their preferences, and AADR system 60 selects the mediator in accordance with the preferences of customer 20 and merchant 40. Let it be assumed that mediator 70 is selected.

At step 300, AADR system 60 prepares a dispute case record for mediator 70, including a summary of what has occurred so far, and a record of all communications between AADR system 60, customer 20 and merchant 40, including any images or attachments submitted by the disputants. AADR system 60 also obtains the comment profiles for customer 20 and merchant 40 from comment system 50 and includes them in the dispute case record. In some

- 1 embodiments, AADR system 60 also finds relevant completed disputes and appends them to the 2 case record, appends pertinent laws or procedures to the case record, and appends suggested 3 actions to the case record. AADR system 60 also updates its docket to schedule appropriate 4 reminders and status e-mails for this case, as a convenience to mediator 70 and to ensure that the 5 interests of customer 20 are actively pursued. 6 At step 305, AADR system 60 prepares comments about customer 20 and about merchant 7 40 reflecting their participation in the mediation portion of the automated alternative dispute 8 resolution mechanism, and sends the comments to comment system 50. 9 At step 310, mediator 70 conducts an on-line mediation between customer 20 and **10** merchant 40, using AADR system 60 as a docketing, communications, and recording mechanism. Mediator 70 may conduct off-line negotiations, such as telephone calls or face-to
  - face meetings, and is responsible for preparing a summary of such actions to be part of the case record, and submitting any such summary to AADR system 60. When mediator 70 concludes the mediation, at step 315, AADR system 60 prepares comments about customer 20 and about merchant 40 reflecting their participation in the mediation portion of the automated alternative dispute resolution mechanism, and sends the comments to comment system 50.

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- Typically, mediator 70 obtains a settlement between customer 20 and merchant 40. At step 320, AADR system 60 determines that neither party will appeal, such as by sending appeal inquiry e-mails, and so processing proceeds to step 350.
- However, if at step 320, one of the parties appeals or becomes dissatisfied with the settlement, the processing proceeds to step 325 for subsequent resolution of this dispute.
- Generally, only narrow grounds are appropriate for an appeal, such as lack of clarity in the 22

settlement, a mistake of fact or a miscalculation, or that the settlement has become impossible to 1 2 perform. 3 Although steps 300-325 have been described with respect to mediation, it will be 4 appreciated that, in some embodiments, arbitration is performed instead of mediation. 5 In a modification, instead of an appeal at step 320, the parties may move from a 6 mediation process to an arbitration process. 7 At step 350, AADR system 60 has determined that customer 20 and merchant 40 have agreed to a settlement, and sends closure e-mails reflecting this agreement to each of them. 8 9 AADR system 60 also dockets a reminder e-mail for a predetermined time in the future, such as **1**0 two weeks. At the predetermined time, AADR system 60 sends reminder e-mails to each of 112 12 13 customer 20 and merchant 40, to ensure that they have complied with the terms of the settlement. In particular, customer 20 and merchant 40 must each affirmatively acknowledge that they have complied. In another embodiment, lack of reply may serve as compliance acknowledgment. 14 15 At step 355, AADR system 60 checks whether a compliance response has been received from each of customer 20 and merchant 40. If not, AADR system 60 sends a reminder e-mail **1**6 with an "urgent" priority, and dockets a "second reminder date". If responses have not yet been received at AADR system 60 by the second reminder date, then AADR system 60 assumes 17 18 satisfactory compliance has occurred and processing proceeds to step 390. If, at step 355, AADR system 60 receives responses from customer 20 and merchant 40 19 before its docketed reminder date, then AADR system 60 updates its docket to remove the 20 21 reminder, and proceeds to step 360. 22 At step 360, AADR system 60 determines whether compliance with the settlement agreement has occurred. If compliance has occurred, processing proceeds to step 390. 23

1	At step 390, AADR system 60 prepares comments about customer 20 and about merchant
2	40 reflecting their participation in the automated alternative dispute resolution mechanism with a
3	successful settlement, and sends the comments to comment system 50. At step 395, AADR
4	system 60 also prepares a summary of the dispute and adds it to its database of case records,
5	completing processing of this dispute.
6	If, at step 360, AADR system 60 determines that compliance has not yet occurred, such
7	as by analyzing the type and/or content of response to its previous e-mail, then at step 365,
8	AADR system 60 sends an urgent e-mail to the non-compliant party, assumed to be merchant 40
9	for exemplary purposes in Fig. 3, and dockets a reminder date.
<b>1</b> 0	At step 370, AADR system 60 checks whether a response has been received from
<u>-</u> 11	merchant 40 by the reminder date. If not, AADR system 60 sends a reminder e-mail with an
10 11 11 12 13	"urgent" priority, and dockets a "second reminder date". If a response has not yet been received
	at AADR system 60 by the second reminder date, then AADR system 60 assumes that merchant
14 15	40 is non-compliant with an agreed settlement, and, at step 385, executes an escalation
<u></u>	procedure, such as referral to a human or to a government agency or other party. AADR system
<u>1</u> 6	60 prepares comments as appropriate and updates the case record.
17.	If a response from merchant 40 is received before the reminder date, then at step 375,
18	AADR system 60 logs the response and forwards it to customer 20. For example, merchant 40
19	may have shipped a replacement, but the replacement may not have arrived. Customer 20
20	typically sends an e-mail response to merchant 40, not explicitly shown in Fig. 3. AADR system
21	60 dockets a compliance reminder e-mail date, and processing proceeds to step 355 or 360.
22	In some embodiments, AADR system 60 sends its case summary to the participants for
23	their approval and so that they may provide general comments on the automated alternative

1 dispute resolution procedure. In some cases, receipt of a case summary from AADR system 60 2 serves as a pre-requisite event that enables the receiving party, such as customer 20, merchant 40 3 and/or mediator 70, to leave a comment about AADR system 60 at comment system 50. 4 In other examples, the customer purchase occurs at e-marketplace 30, and AADR system 5 60 also functions to assist in determining whether e-marketplace 30 or merchant 40 is the proper 6 party to resolve the customer's dispute. This is beneficial in avoiding a situation in which a 7 customer feels lost such as when each of e-marketplace 30 and merchant 40 disclaim 8 responsibility for dispute resolution. For example, AADR system 60 forwards e-mail on behalf 9 of customer 20 to e-marketplace 30 for purchase of an electronic item. E-marketplace 30 \_10 helpfully answers that merchant 40, the manufacturer of the electronic item, is the party to 1112 1213 contact. AADR system 60 automatically forwards the customer's problem to merchant 40, while notifying the customer. Merchant 40 answers that due to the nature of the problem, emarketplace 30 bears responsibility for resolving the customer's problem. AADR system 60 直4 直5 detects that the customer is in a "catch 22" situation, and reacts appropriately, such as by sending a special notice to e-marketplace 30 and merchant 40 requesting one of them participate in 16 conflict resolution, or by selecting the party with the better record of service, or by selecting the 17 geographically closest party, or by randomly selecting one party to participate. AADR system 18 60 advises the customer of which party is participating in the conflict resolution. Although the present invention has been described with the customer and mediator each 19 using a personal computer, in other embodiments, an interactive voice response system is 20 coupled to AADR system 60 and allows the consumer and/or mediator to participate by 22 telephone. In some cases, speech-to-text conversion and/or text-to-speech conversion are

automatically provided. Instead of a personal computer, another device having a processor, such as a personal assistant or smart phone, may be employed by the customer and/or mediator.

Although not explicitly shown, AADR system 60 may be configured to send copies of communications to additional parties. For example, a mediator-in-training may be provided with the same information as mediator 70, and have the opportunity to conduct a mediation under the supervision of mediator 70. The mediator-in-training can be at a geographically different location than mediator 70, in a different time zone, speaking a different language while using an automatic translation facility that is part of or separate from AADR system 60 and so on.

Although an illustrative embodiment of the present invention, and various modifications thereof, have been described in detail herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to this precise embodiment and the described modifications, and that various changes and further modifications may be effected therein by one skilled in the art without departing from the scope or spirit of the invention as defined in the appended claims.

What is claimed is:

1. A method of automated alternative dispute resolution, comprising:
automatically receiving a communication from a party, the communication being a
portion of a pre-defined dispute resolution process.

processing the communication, and returning the processed communication to the party.

- 2. The method of claim 1, wherein the processing comprises preparing a summary based on information in the communication received from the party.
- 3. The method of claim 1, wherein the processing comprises finding similar completed cases based on information in the communication received from the party.
- 4. The method of claim 1, wherein the processing comprises suggesting a resolution for a dispute described in the communication received from the party.
- 5. The method of claim 1, wherein the processing comprises automatically setting a timeout interval for a response.
- 6. A method of automatically providing a comment relating to an automated alternative dispute resolution process, comprising:

determining that an action or inaction by a subject has occurred in a pre-defined dispute resolution process,

preparing a comment about the subject's action or inaction, and sending the comment to a comment collection system.

- 7. The method of claim 6, wherein the subject is a merchant.
- 8. The method of claim 6, wherein the comment is related to a previously provided comment.

9. A method of automatically preparing a case record for an alternative dispute resolution process, comprising:

collecting communications between an automated alternative dispute resolution system and at least one of the parties to the dispute,

automatically summarizing the collection of communications, and presenting the summary and the collection of communications as the case record to a dispute resolver.

- 10. The method of claim 9, further comprising appending relevant laws to the case record.
- 11. The method of claim 9, further comprising appending comments about at least one of the parties to the dispute to the case record.
- 12. The method of claim 9, further comprising appending a suggested action to the case record.

### ABSTRACT OF THE INVENTION

In automated alternative dispute resolution, a communication from a party is automatically received, the communication being a portion of a pre-defined dispute resolution process, the communication is processed, and returned to the party. A comment relating to an automated alternative dispute resolution process is automatically provided by determining that an action or inaction by a subject has occurred in a pre-defined dispute resolution process, preparing a comment about the subject's action or inaction, and sending the comment to a comment collection system. A record is automatically prepared for an alternative dispute resolution process by collecting communications between an automated alternative dispute resolution system and at least one of the parties to the dispute, automatically summarizing the collection of communications, and presenting the summary and the collection of communications to a dispute resolver.

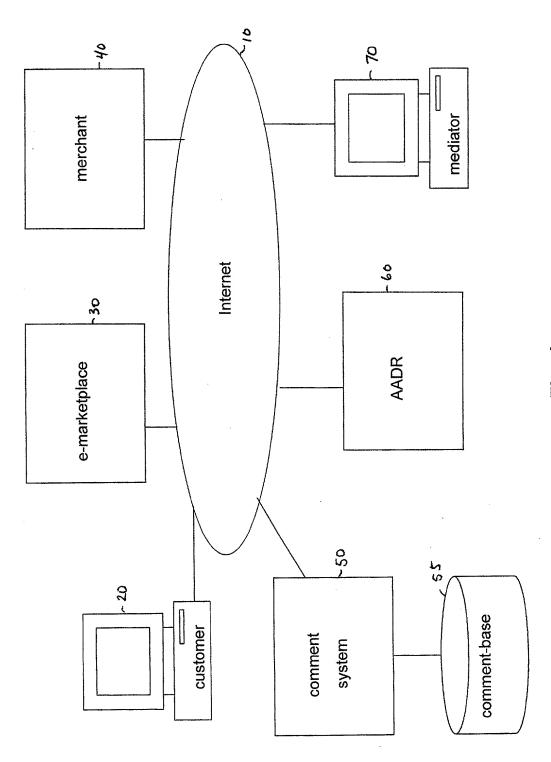


Fig. 1

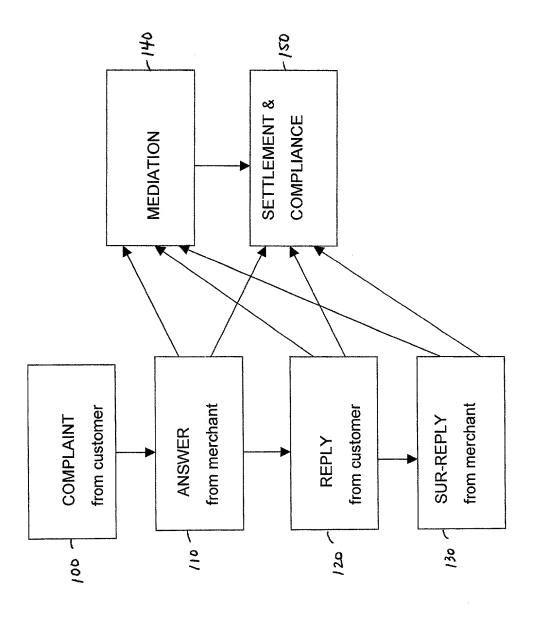
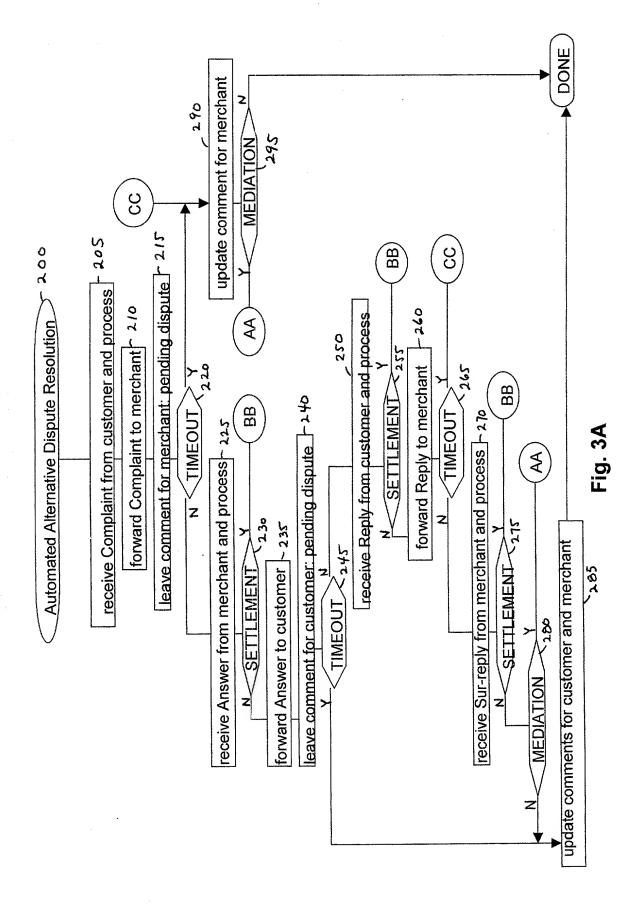


Fig. 2



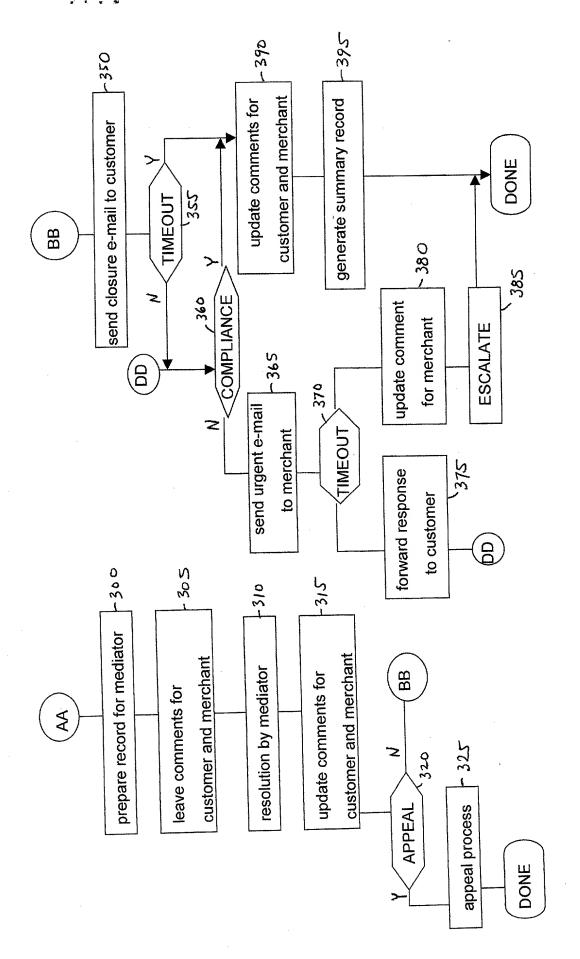


Fig. 3B

Fig. 3C

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### **DECLARATION**

As a below name inventor, I hereby declare that:

I believe I am an original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled AUTOMATED ALTERNATIVE DISPUTION RESOLUTION SYSTEM, the specification of which is attached.

I hereby state that I have reviewed and understand the contents of the aboveidentified specification.

I acknowledge the duty to disclose all information known to me that is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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